Business Statistics 41000-81/82 – Spring Quarter 2013

Professor: Hedibert Freitas Lopes
Teaching Assistant: Samir Warty
Course syllabus
Course notes: 2 per page + 3 per page
Old exams: Final exam – Spring 2011 (solution) - Midterm exam – Spring 2011 (solution)
Homework assignments: Homework I (solution), Homework II (solution) (hw2-solution.xls), Homework III (solution), Homework IV (solution), Homework V (solution) (usedcars.xls) (usedcars.txt) (R code)

Additional class material

Class 8: May 20th and 21st
Profit on income, birth rate, SS recipients, CV deaths, pop. age 65 and older (R code)
Salary on position, years of experience and gender (R code)
National Longitudinal Survey of Youth regression (R code)
House price regression + models + ranked models (R code)

Class 7: May 13th and 14th
House price regression (R code)
Boston house price versus crime rate (R code)

Class 5: April 29th and 39th
Midterm solution (graphical summaries)

Class 4: April 22nd and 23rd
Why NOT to trust excel with your life
GDP growth (R code)
PM10 emissions (R code)
Mortality rates under 5-years of age (R code)
Revisiting the house price data
DJIA: 19 components form January 1981 to December 2012 (R code)

Class 3: April 15th and 16th
Conditional probability
Portfolio allocation: nasdaq and djia
Repeating the Fama example with 100 components from the S&P500 (R code)
Six Brazilian companies (R code)
Portfolio allocation: NYSE 73 components and NASDAQ 42 components (R code)

Class 2: April 8th and 9th
Height of MBA male students
Class 1: April 1st and 2nd
Kurtosis – measuring tail-thickness or extremity

Data sets
returns.txt – monthly returns on a broad based portfolio of Canadian assets (class notes page 12)
volume.txt – daily volume in the cattle pit (class notes page 15)
mutualfunds.txt – returns on different mutual funds such as the equally weighted market and T-bills (class notes page 18/19)
beer-production-US.txt – number of beers male MBA students claim they drink without getting drunk (class notes page 20)
temperature.txt – average daily temperature in Rio, Durham and Chicago - 1/1/1995 and 12/11/2008 (class notes page 83)
highest-temperatures.txt – highest temperatures per state in the US (class notes page 89)
unemployment.txt – unemployment rates per state in the US in 2004 (class notes page 92)
stockreturns-countries.txt – EOE, DAX, CAC40, FTSE100, Hang Seng, Nikkei, Singapore All Shares and S&P500 (class notes page 96)
houseprice.txt – house characteristics: price, size, neighborhood, number of bedrooms and bathrooms, etc (class notes page 122)
US.xls – social indicators per state in the US
nasdaq-djia.txt – NASDAQ and DJIA daily returns for the period between January 4th 2000 to December 31st 2008
SP500-dailyreturns.txt – S&P500 daily returns for the period between January 5th 2009 to September 24th 2009
SP500-monthlyreturns.txt – S&P500 daily returns for the period between February 1950 to August 2009
dowjones-components.txt – Daily returns for the components of the DJIA for the period between02/02/1997-12-29-2006
DJIA-19components-jan1981-dec2012.txt
sp500-components.txt – Daily returns for the components of the S&P500
sp500-ge.xls – GE and S&P500 daily returns for the period between January 2nd 1962 and November 19th 2009
GDP2008.xls – GDP in billions of US dollars
heights-weights.xls – Height and weight of several male MBA students
online-investment-portfolios.txt – Value of investiments (in thousands of dollars) for a sample of clients in the 40- and 50- age group
amsterdam-frankfurt-paris-london-1997.xls – Equally weighted porfolios (Amsterdam, Frankfurt, Paris, London)
profit.txt - salary.txt - boston-houseprice.txt - logwages-yearseducation.txt - GDPgrowth.txt & GDPgrowth.xls – pm10-emission.txt & pm10-emission.xls - mortality-under5.txt & mortality-under5.xls - Brazil.txt - nyse73-nasdaq42.txt